	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L1	14961	fluorophore or fluorogenic	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:10			0
2	BRS	L2	5	h-dimer or (h-type adj dimer)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:10			0
3	BRS	L3	5	homo-doubly adj labeled	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:10			0
4	BRS	L4	6	2 or 3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:11			0
5	BRS	L5	5	1 same 4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:11			0
6	BRS	L6	1682	quenching same 1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:56			0
7	BRS	L7	140	6 same (polypeptide or peptide)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:57			0
8	BRS	L8	43380	mammalian adj cell	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:57			0
9	BRS	L9	1	7 same 8	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:57			0
10	BRS	L10	1	5 same 8	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:57			0
11	BRS	L11	3990	homo$1dimer	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:58			0
12	BRS	L12	49	1 same 11	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:58			0
13	BRS	L13	6	12 same (polypeptide or peptide)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 16:59			0
14	BRS	L14	1670	carboxytetramethylrhodamine or carboxyrhodamine-x or carboxyrhodamine-110 or diethylaminocoumarin or (carbocyanine adj dye)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 17:01			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
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16	BRS	L16	43380	mammalian adj cell	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 17:02			0
17	BRS	L17	0	15 same 16	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 17:02			0
18	BRS	L18	12	packard adj beverly.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 17:02			0
19	BRS	L19	13	komoriya adj akira.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 17:02			0
20	BRS	L20	13	18 or 19	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 17:03			0
21	BRS	L21	5	20 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/01/31 17:03			0

> d his

(FILE 'HOME' ENTERED AT 17:04:42 ON 31 JAN 2004)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
17:05:02 ON 31 JAN 2004
L1 37247 S FLUOROPHORE OR FLUOROGENIC
L2 209 S H-DIMER OR (H-TYPE DIMER)
L3 2 S HOMO-DOUBLY LABELED
L4 209 S L2 OR L3
L5 6 S L1 (P) L4
L6 4 DUPLICATE REMOVE L5 (2 DUPLICATES REMOVED)
L7 148086 S MAMMALIAN CELL
L8 0 S L6 (P) L7
L9 4 S (PEPTIDE OR POLYPEPTIDE) (P) L6
L10 3554 S CARBOXYTETRAMETHYLRHODAMINE OR CARBOXYRHODAMINE-X OR CARBOXYR
L11 2 S L10 (P) L4
L12 2 DUPLICATE REMOVE L11 (0 DUPLICATES REMOVED)
L13 0 S L12 NOT L6
L14 347 S PACKARD B?/AU
L15 302 S KOMORIYA A?/AU
L16 522 S L14 OR L15
L17 18 S L16 AND L4
L18 7 S L17 AND L1
L19 5 DUPLICATE REMOVE L18 (2 DUPLICATES REMOVED)
L20 1 S L19 NOT L6

=> log y

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FILE 'MEDLINE' ENTERED AT 17:05:02 ON 31 JAN 2004

FILE 'CAPLUS' ENTERED AT 17:05:02 ON 31 JAN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE 'SCISEARCH' ENTERED AT 17:05:02 ON 31 JAN 2004
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FILE 'AGRICOLA' ENTERED AT 17:05:02 ON 31 JAN 2004

=> s fluorophore or fluorogenic
L1       37247 FLUOROPHORE OR FLUOROGENIC

=> s h-dimer or (h-type dimer)
L2         209 H-DIMER OR (H-TYPE DIMER)

=> s homo-doubly labeled
L3           2 HOMO-DOUBLY LABELED

=> s l2 or l3
L4         209 L2 OR L3

=> s l1 (p) l4
L5           6 L1 (P) L4

=> duplicate remove l5
DUPLICATE PREFERENCE IS 'CAPLUS, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L5
L6           4 DUPLICATE REMOVE L5 (2 DUPLICATES REMOVED)

=> d l6 1-4 ibib abs

L6   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2003:874871  CAPLUS
DOCUMENT NUMBER:          139:360902
TITLE:                    Homo-doubly fluorophore-labeled peptides for the
                          detection of enzyme activity in biological samples
INVENTOR(S):              Packard, Beverly; Komoriya, Akira
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 42 pp., Cont.-in-part of Appl.
                          No. PCT/US00/24882.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   4
PATENT INFORMATION:

     PATENT NO.          KIND  DATE          APPLICATION NO.  DATE
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     US 2003207264        A1   20031106      US 2000-747287   20001222
     US 6037137           A    20000314      US 1997-802981   19970220
     WO 2001018238        A1   20010315      WO 2000-US24882  20000911
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
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             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     WO 2002061038        A2   20020808      WO 2001-US49781  20011221
     WO 2002061038        C2   20021128
     WO 2002061038        A3   20030313
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
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CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1356084 A2 20031029 EP 2001-998079 20011221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 1997-802981 A2 19970220
US 1999-394019 A2 19990910
WO 2000-US24882 A2 20000911
US 2000-747287 A 20001222
WO 2001-US49781 W 20011221

AB The present invention provides for novel reagents whose fluorescence changes upon cleavage or a change in conformation of a backbone. The reagents comprise a backbone (e.g. nucleic acid, polypeptide, etc.) joining two ***fluorophores*** of the same species whereby the ***fluorophores*** form an ***H*** - ***dimer*** resulting in quenching of the fluorescence of the ***fluorophores*** . One such ***fluorophore*** -labeled peptide comprises DAIP(Nle)SIPKGY, where the ***fluorophore*** is linked to the N-terminus via the .alpha.-amino group of aspartic acid and to the .epsilon.-amino group of lysine by the displacement of a succinimidyl group linked to 6-carboxytetramethylrhodamine (6-TMR) or 5/6-carboxy-X-rhodamine. When the backbone is cleaved or changes conformation, the ***fluorophores*** are sepd., no longer forming an ***H*** - ***type*** ***dimer*** , and are de-quenched thereby providing a detectable signal. The use of a single ***fluorophore*** rather than an "acceptor-donor" fluorescence resonance energy transfer system offers synthesis and performance advantages. An addnl. discovery of this invention is that attachment of a hydrophobic protecting group to a polypeptide enhances uptake of that polypeptide by a cell. A new class of profluorescent protease substrate was designed and synthesized with spectral properties that fit the exciton model.

L6 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:594968 CAPLUS
DOCUMENT NUMBER: 137:151788
TITLE: Homo-doubly labeled compositions for the detection of enzyme activity in biological samples
INVENTOR(S): Packard, Beverly S.; Komoriya, Akira
PATENT ASSIGNEE(S): Oncoimmunin, Inc., USA
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002061038	A2	20020808	WO 2001-US49781	20011221
WO 2002061038	C2	20021128		
WO 2002061038	A3	20030313		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003207264 A1 20031106 US 2000-747287 20001222
EP 1356084 A2 20031029 EP 2001-998079 20011221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2000-747287 A 20001222
US 1997-802981 A2 19970220
US 1999-394019 A2 19990910
WO 2000-US24882 A2 20000911
WO 2001-US49781 W 20011221

AB The present invention provides for novel reagents whose fluorescence or absorption spectra change upon cleavage or a change in conformation of a backbone. Fluorescence or absorption spectra of these indicators change in the presence of active proteases, nucleases, glycosidases, and the

like. The reagents comprise a backbone (e.g. nucleic acid, polypeptide, etc.) joining two chromophores (e.g. ***fluorophores***) of the same species whereby the chromophores form an ***H*** - ***dimer*** resulting in quenching of the fluorescence of the ***fluorophores*** or a change in absorption spectra of the chromophores. When the backbone is cleaved or changes conformation, the chromophores are sepd., no longer forming an ***H*** - ***type*** ***dimer*** , and are de-quenched thereby providing a detectable signal. The use of a single chromophore rather than an "acceptor-donor" fluorescence resonance energy transfer system offers synthesis and performance advantages.

L6 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 1998:103406 CAPLUS
DOCUMENT NUMBER: 128:254447
TITLE: Intramolecular excitonic dimers in protease substrates: Modification of the backbone moiety to probe the H-dimer structure
AUTHOR(S): Packard, Beverly Z.; Komoriya, Akira; Nanda, Vikas; Brand, Ludwig
CORPORATE SOURCE: OncoImmunin Inc., College Park, MD, 20742, USA
SOURCE: Journal of Physical Chemistry B (1998), 102(10), 1820-1827
CODEN: JPCBFK; ISSN: 1089-5647
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB NorFES (DAIPN1SIPKGY, N1 = norleucine) is an undecapeptide that contains a recognition sequence and cleavage site for the serine protease elastase. When NorFES is doubly labeled with a variety of ***fluorophores*** on opposite sides of this amino acid sequence, the fluorescence is quenched due to formation of intramol. ground-state dimers. Although the spectral characteristics of these dimers are predictable by exciton theory, influence of the peptide backbone on ***H*** - ***dimer*** formation is less well understood. Specifically, factors that modify the attractive forces between and orientation of dyes are not well-characterized. Thus, by varying the dye linker moieties, it was sought to evaluate the thermodn. parameters for intramol. H-type dye-dye assocn. and the structures of these dimers. Data is presented from a series of ***homo*** - ***doubly*** ***labeled*** NorFES derivs. that differ by the addn. of one or two 6-aminohexanoic acids to the peptide backbone. By comparing absorption and fluorescence properties of these substrates as a function of temp., it was examd. how such addns. could modify dimerization; the free energy of activation (.DELTA.G.thermod.) for intramol. dimer disruption of each substrate was calcd. To gain further insight into dye-dye orientation, a NorFES substrate modified to facilitate intramol. H-dimerization was synthesized with different geometric dye isomers. The data show that length and conformation of the peptide plus linker as well as stereochem. of dye-peptide conjugation play important roles in intramol. ground-state complexation. The factors that influence the spectral properties of intramol. H-dimerization support earlier proposed model for ***H*** - ***dimers*** in NorFES peptides.
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 1997:361577 CAPLUS
DOCUMENT NUMBER: 127:62451
TITLE: Structural characteristics of ***fluorophores*** that form intramolecular ***H*** - ***type*** ***dimers*** in a protease substrate
AUTHOR(S): Packard, Beverly Z.; Komoriya, Akira; Toptygin, Dmitri D.; Brand, Ludwig
CORPORATE SOURCE: OncoImmunin Inc., College Park, MD, 20742, USA
SOURCE: Journal of Physical Chemistry B (1997), 101(25), 5070-5074
CODEN: JPCBFK; ISSN: 1089-5647
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Recently, we designed and synthesized a new class of profluorescent protease substrates whose spectral properties fit the exciton model; more specifically, spectra of these polypeptides which were doubly labeled with rhodamines showed blue-shifted absorption peaks and fluorescence quenching, both indicators of ***H*** - ***dimer*** formation. In the work described here NorFES, an undecapeptide which is cleaved by the serine protease elastase, was homodoubly labeled on opposite sides of its

cleavage site with six ***fluorophores*** to identify structural elements of dyes which influence intramol. ***H*** - ***type*** ***dimer*** formation. Absorption and fluorescence spectra of these six substrates obtained before and after enzymic cleavage indicate that the exciton band is strongest in the peptide doubly labeled with tetramethylrhodamine, followed by rhodamine-X, and then (diethylamino)coumarin. In contrast, spectra of NorFES homodoubly labeled with fluorescein, hydroxycoumarin, or pyrene do not exhibit exciton bands. These data suggest that factors significant in H-type dimerization are as follows (in decreasing order): delocalized charge, symmetry, and magnitude of the lowest energy electronic transition dipole. Surprisingly, in the group of ***fluorophores*** in this study, no evidence for hydrophobic interactions as an important influence was obsd.

```
=> s mammalian cell
L7       148086 MAMMALIAN CELL

=> d his

     (FILE 'HOME' ENTERED AT 17:04:42 ON 31 JAN 2004)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     17:05:02 ON 31 JAN 2004
L1         37247 S FLUOROPHORE OR FLUOROGENIC
L2           209 S H-DIMER OR (H-TYPE DIMER)
L3             2 S HOMO-DOUBLY LABELED
L4           209 S L2 OR L3
L5             6 S L1 (P) L4
L6             4 DUPLICATE REMOVE L5 (2 DUPLICATES REMOVED)
L7        148086 S MAMMALIAN CELL

=> c l6 (p) l7
C IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l6 (p) l7
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L44 (P) L37'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L48 (P) L39'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L50 (P) L40'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L52 (P) L41'
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FIELD CODE - 'AND' OPERATOR ASSUMED 'L54 (P) L42'
L8             0 L6 (P) L7

=> s (peptide or polypeptide) (p) l6
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FIELD CODE - 'AND' OPERATOR ASSUMED 'YPEPTIDE) (P) L57'
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FIELD CODE - 'AND' OPERATOR ASSUMED 'YPEPTIDE) (P) L63'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'YPEPTIDE) (P) L65'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'YPEPTIDE) (P) L67'
L9             4 (PEPTIDE OR POLYPEPTIDE) (P) L6

=> s carboxytetramethylrhodamine or carboxyrhodamine-X or carboxyrhodamine-110 or diethylaminocoum
L10         3554 CARBOXYTETRAMETHYLRHODAMINE OR CARBOXYRHODAMINE-X OR CARBOXYRHOD
                 AMINE-110 OR DIETHYLAMINOCOUMARIN OR (CARBOCYANINE DYE)

=> d his

     (FILE 'HOME' ENTERED AT 17:04:42 ON 31 JAN 2004)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     17:05:02 ON 31 JAN 2004
L1         37247 S FLUOROPHORE OR FLUOROGENIC
L2           209 S H-DIMER OR (H-TYPE DIMER)
L3             2 S HOMO-DOUBLY LABELED
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L4          209 S L2 OR L3
L5            6 S L1 (P) L4
L6            4 DUPLICATE REMOVE L5 (2 DUPLICATES REMOVED)
L7       148086 S MAMMALIAN CELL
L8            0 S L6 (P) L7
L9            4 S (PEPTIDE OR POLYPEPTIDE) (P) L6
L10        3554 S CARBOXYTETRAMETHYLRHODAMINE OR CARBOXYRHODAMINE-X OR CARBOXYR

=> s l10 (p) l4
L11           2 L10 (P) L4

=> duplicate remove l11
PROCESSING COMPLETED FOR L11
L12           2 DUPLICATE REMOVE L11 (0 DUPLICATES REMOVED)

=> s l12 not l6
L13           0 L12 NOT L6

=> s packard b?/au
L14         347 PACKARD B?/AU

=> s komoriya a?/au
L15         302 KOMORIYA A?/AU

=> s l14 or l15
L16         522 L14 OR L15

=> s l16 and l4
L17          18 L16 AND L4

=> s l17 and l1
L18           7 L17 AND L1

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DUPLICATE PREFERENCE IS 'CAPLUS, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L18
L19           5 DUPLICATE REMOVE L18 (2 DUPLICATES REMOVED)

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L20           1 L19 NOT L6

=> d l20 1 ibib abs

L20  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         1998:605029  CAPLUS
DOCUMENT NUMBER:          129:213504
TITLE:                    Protease indicator substrates exhibiting increased
                          fluorescence due to conformational change following
                          cleavage
INVENTOR(S):                ***Komoriya, Akira***  ;   ***Packard, Beverly S.***
PATENT ASSIGNEE(S):       Oncoimmunin, Inc., USA
SOURCE:                   PCT Int. Appl., 90 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   4
PATENT INFORMATION:

     PATENT NO.         KIND  DATE           APPLICATION NO.  DATE
     --------------     ----  --------       ---------------  --------
     WO 9837226          A1   19980827       WO 1998-US3000   19980220
         W:  AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
             FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
             GA, GN, ML, MR, NE, SN, TD, TG
     US 6037137          A    20000314       US 1997-802981   19970220
     AU 9866567          A1   19980909       AU 1998-66567    19980220
     AU 745148           B2   20020314
     EP 988394           A1   20000329       EP 1998-908564   19980220
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     JP 2001514492       T2   20010911       JP 1998-536778   19980220
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PRIORITY APPLN. INFO.: US 1997-802981 A 19970220
WO 1998-US3000 W 19980220

OTHER SOURCE(S): MARPAT 129:213504

AB The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone each end of which is conjugated to a ***fluorophore*** . When the folded peptide is cleaved, as by digestion with a protease, the ***fluorophores*** provide a high intensity fluorescent signal at a visible wavelength. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biol. samples, in particular in frozen tissue sections. Thus this invention also provides for methods of detecting protease activity in situ in frozen sections.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 17:04:42 ON 31 JAN 2004)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 17:05:02 ON 31 JAN 2004

L1 37247 S FLUOROPHORE OR FLUOROGENIC
L2 209 S H-DIMER OR (H-TYPE DIMER)
L3 2 S HOMO-DOUBLY LABELED
L4 209 S L2 OR L3
L5 6 S L1 (P) L4
L6 4 DUPLICATE REMOVE L5 (2 DUPLICATES REMOVED)
L7 148086 S MAMMALIAN CELL
L8 0 S L6 (P) L7
L9 4 S (PEPTIDE OR POLYPEPTIDE) (P) L6
L10 3554 S CARBOXYTETRAMETHYLRHODAMINE OR CARBOXYRHODAMINE-X OR CARBOXYR
L11 2 S L10 (P) L4
L12 2 DUPLICATE REMOVE L11 (0 DUPLICATES REMOVED)
L13 0 S L12 NOT L6
L14 347 S PACKARD B?/AU
L15 302 S KOMORIYA A?/AU
L16 522 S L14 OR L15
L17 18 S L16 AND L4
L18 7 S L17 AND L1
L19 5 DUPLICATE REMOVE L18 (2 DUPLICATES REMOVED)
L20 1 S L19 NOT L6

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	71.39	71.60
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.47	-3.47

STN INTERNATIONAL LOGOFF AT 17:14:20 ON 31 JAN 2004